



1 / 28

Map of Human IL-17 Like cDNA (SEQ ID NO:1) and Amino Acid (SEQ ID NO:2) Sequences

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Figure 2A
(Map of Mouse IL-17 Like cDNA (SEQ ID NO:3) and Amino Acid (SEQ ID NO:4) Sequences with Predicted Signal Peptide)

1	ATGTA CCAGGCTGTTGCATTCTGGCAATGATCGTGGGAACCCACACCGTCAGCTTG M Y Q A V A F L A M I V G T H T V S L	19
58	CGGATCCAGGAGGGCTGCAAGTCACTTGCCAGCTGCCCCAGCAAGAGCAAGAACCC R I Q E G C S H L P S C C P S K E Q E P	39
11	CCGGAGGAGTGGCTGAAGTGGAGCTCTGCATCTGTGTCATCTGGCCAC P E W L K W S S A S V S P P E P L S H	59
1118	ACCCACCGCAGAATCCTGCCAGGAGGGCCAGCAAGGATGGCCCTCAACAGCAGGGCCATC T H H A E S C R A S K D G P L N S R A I	79
31	TCTCCATTGGAGCTATGAGTTGGACAGGGACTTGAATCGGGTCCCCAGGACCTGTGAC S P W S Y E L D R D L N R V P Q D L Y H	99
178	GCTCGATGCCATTGCGTCAGCCTACAGACAGGCTCCACATGGACCCGGCTG A R C L C P H C V S L Q T G S H M D P L	119
51	GCGAACTCCCGTCCCACTTACCAACCAGACGGTCTTACCGGGGCCATGCCATGGC G N S V P L Y H N Q T V F Y R R P C H G	139
238	GAGGAAGGTACCCATGCCGCTACTGCTTGGAGGCCAGGGCTTACCGAGTCTCCTGGCT E E G T H R R Y C L E R R L Y R V S L A	159
71	TGTGTGTGTGCCGGGGTCACTGGCTTACTGCTCATGCTCACCACCTGCCTGAGGCTGA C V C V R P R V M A *	170
298	TGCCCGGTTGGAGAGGGCCAGGGCTACCTTGCCTTGGCAAGATGGAGACTTGGGAG GCCCTCCAAAGCCCTAACCTGAAGCAGCAGGGCTCCGGACAAAGATGGAGACTTGGGAG AAACTCTGACTTTGCACCTTTGCACTTTGGAAAGGCACTTTGGCTTCCGCTTGTGC	658

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Figure 2B

718 TGCTAGAGGATGCTGTTGGCATTCTACTCAGGAACGGACTCCAAAGGCCCTGCTGACC
778 CTGGAAAGCCATACTCCTGGCTCCCTCTGAATCCCCAAACTCCCTGGCACAGGCACCT
838 TCTCCACCTCTCCCCCTTGCCATTGTTGTGTTGGCATGCCAACTCTGGGTGC
898 AGCCAGGTGTAATTGCCTTGAAAGGATGGTCTGAGGTGAAGCTGTTATCGAAAGTGAAG
958 AGATTATCCAAATAAACATCTGTGTTAAAAAAAGAAAAAAA 1496

Map of Non-Secreted Form of Mouse IL-17 Like cDNA (SEQ ID NO: 9), and
Corresponding Amino Acid Sequence (SEQ ID NO: 10)

1 CCGGGCAGGTGCCCTGGGGCTCCAAAGCTTAGGGAAGCTCCAGGTGTTGGAAAT
61 GAAGAAAAGGCCACCGAGCAAAAGAACAGAGAACAGAACAGAACAGAACAGAACAG
121 GCCTAGGGTCGAGGGCCATTATCACCTACAAATCAGAACATGTTGGAGTGCCTATTCTAGAGG
181 TCTCCATCTTGCCTATTGCTGGGTCTGCTCAGAACAGAACAGAACAGAACAGAACAG
241 AGAACAGCTTCTGCTTACCCAGCAGGTGCTGACCTTCCCCAGAGGGCACAGGGAAAGGAA
301 TTCCAGCCCCGGTTGGCTGCCAGGGCTTCCCTCTGGCTTGGGTACAGAGGAGAACAG
361 AAACCCAAATGCTCCTATGAAAAACAAATGTCCCCGTCAATCCAGGCCAGATCATTCTGC
421 AGTGTCAACAGTGAGAACAGAACAGCTGGGTCAATTCTGTGCCCTAAGAGTGCCTGTTCT
481 GCACTGCCAAGGGCTGTGCCATTCTGGCAATGATGTTGGAAACCCACACCGTCAGCTTG
541 CGGATCCAGGAGGGCTGCACTTGCCAGCTGCTGCCAGCTGCCAGAAAGCAAGAACCC
11 R I Q E G C S H L P S C C P S K E Q E P 30 10

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Figure 2C

601 CCGGAGGAGTGGCTGAAGTGGAGCTCTGCATCTGTGTCCCCCAGAGCCTCTGAGGCCAC
31 P E E W L K W S S A S V S P P E P L S H 50
661 ACCCACCGCAGAATCCTGCAAGGCCAGCAAGGATGGCCCTCAACAGCAGGGCCATC
51 T H H A E S C R A S K D G P L N S R A I 70
721 TCTCCTGGAGCTATGAGTTGGACAGGGACTTGAATGGGTCCCCAGGACCTGTACCCAC
71 S P W S Y E L D R D L N R V P Q D L Y H 90
781 GCTCGATGCCCTGCTGCCCCACACTGGGTCAAGCAGACAGGCTCCACATGGACCCGCTG
91 A R C L C P H C V S L Q T G S H M D P L 110
841 GCGAACTCCGTCCTTACCTTACCAACCACAGACGGTCTTACCGGGGCCATGCCATGGC
111 G N S V P L Y H N Q T V F Y R R P C H G 130
901 GAGGAAGGTACCCCATGGCGCTACTGGCTTGGAGGCCAGGGTCTACCGAGTCTCCCTGGCT
131 E E G T H R R Y C L E R R L Y R V S L A 150
961 TGTGTGTGTGGCCCCGGGTCAATGGCTTAGTCATGCTCACCACTGCCTGAGGGTGA
151 C V C V R P R V M A * 161
1021 TGCCGGTTGGAGAGGGCCAGGTGTACAATCACCTGCCAATGGGGCCGGGTCAA
1081 GCCCTCCAAAGCCCTACCTGAAGCAGGCCAGGCTCCGGACAAAGATGGAGGACTTGGGAG
1141 AAACCTGACTTTGCACTTTGGAAAGCACTTTGGAAAGGAGCAGGTTCCGCTTGTGC
1201 TGCTAGAGGATGCTGTTGGCATTTCTACTCAGGAACGGGACTCCAAGGGCTGCTGACC
1261 CTGGAAGCCATACTCCTGGCTCCTGGCTGAATCCCCAACCTCCTGGCACAGGCACCT
1321 TCTCCACCTCTCCCCCTTGCCTTGTGTTGGCATGCCAACCTCTGCCATGGCGTGC
1381 AGCCAGGGTGTAAATTGCCTTGTGAAAGGATGGTTATCGAAAGTGAAG
1441 AGATTATCCAAATAAACATCTGTGTTAAAAA 1496

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Figure 3A

Pile-Up of Human IL-17 Like Amino Acid Sequence, hIL-17L (SEQ ID NO:2),
with a Known Human IL-17 Family Member Amino Acid Sequence, hIL-17
(SEQ ID NO:5)

Smith-Waterman score: 155; 25.08 identity in 160 AA overlap

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Figure 3B

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Figure 4
Pile-Up of Human IL-17 like Amino Acid Sequence, hIL-17L, (SEQ ID NO:2)
with a Known Human IL-20 Amino Acid Sequence, hIL-20 (SEQ ID NO:6)

SCORES Init1: 124 Initn: 124 Opt: 175
Smith-Waterman score: 175; 36.7% identity in 90 aa overlap

70	80	90	100	110	120
RWSTVPVPPLEPARPNRHPESCRASEDGPLNSRAISPMWRYIELDRLNRLPQDLYHARCLC					
: : : : : : : : :					
RNIEEMVAQLRNSSELAQRKCEVNQLWMSNKRSSLSPWGYSSINHDPSRIPVVDLPEARCLC					
70	80	90	100	110	120
hIL-17L					
hIL-20					
130	140	150	160	170	180
PHCVSLQQTGSHMDPLGNSVPLVHNQTVFYRRPCHGEEGTRRYCLERRLYRVSLA-CVCV					
: : : : : : : : :					
LGGCVNPFTMQE-DRSMVSVPVF-SQVPVRRRLCPPPPRTGP--CRQRAVMETIVAGCTI					
130	140	150	160	170	180
hIL-17L					
hIL-20					
190	RPRVMA				
	F				

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Figure 5
Pile-Up of Human IL-17 Like Amino Acid Sequence, hIL-17L, (SEQ ID NO:2)
with a Known Human IL-17 Amino Acid Sequence, hIL-17b (SEQ ID NO:7)
Family Member

SCORES Init1: 124 Initn: 124 Opt: 178
 Smith-Waterman score: 178; 35.68 identity in 90 aa overlap

190
בְּרִיאָה
הַתִּירְאָה 171

hIL-17b F 180

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Figure 6A
PILE-UP of Human IL-17 Like Amino Acid Sequence, hIL-17L, (SEQ ID NO:2)
with Amino Acid Sequence of a Known Human IL-17 Family Member,
hIL-17C (SEQ ID NO:8)

SCORES Init1: 149 Initn: 194 Opt: 236

Smith-Waterman score: 243; 34.5% identity in 171 aa overlap

	20	30	40	50	60	69
hIL-17L	GLSVSAPLVTECAVPSMYQVVAFLAMVGMGTHTYSSHW-PSCCPSK-----GQDTSEELLR--					
hIL-17C	MTLLPGILLFLTWIHTCLAAHHDPSLRLGHPHSHGTPHCYSAEELPLGQAPPHLARGA	10	20	30	40	50
	70	80	90	100	110	
hIL-17L	-WS-TVBPVP---PLEPARP-NRH--PES---C---RASE--DGPLNSRAISPWRYELDRD					
hIL-17C	KWQQUALPVALVSSLEAASHRGRHERPSATTQCPVLRPEEVLEADTHQRSISSPWRYRVDTD	60	70	80	90	100
						110

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Figure 6B

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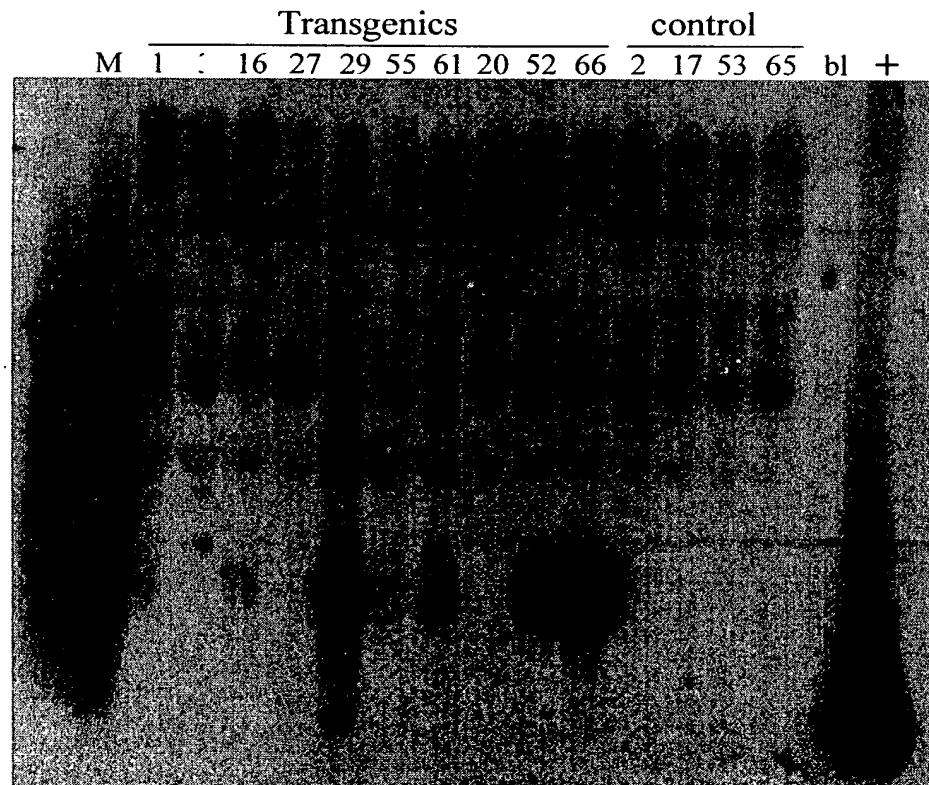


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Figure 7

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Northern Blot Expression Analysis of TH00-018
Necropsied Transgenic Founders



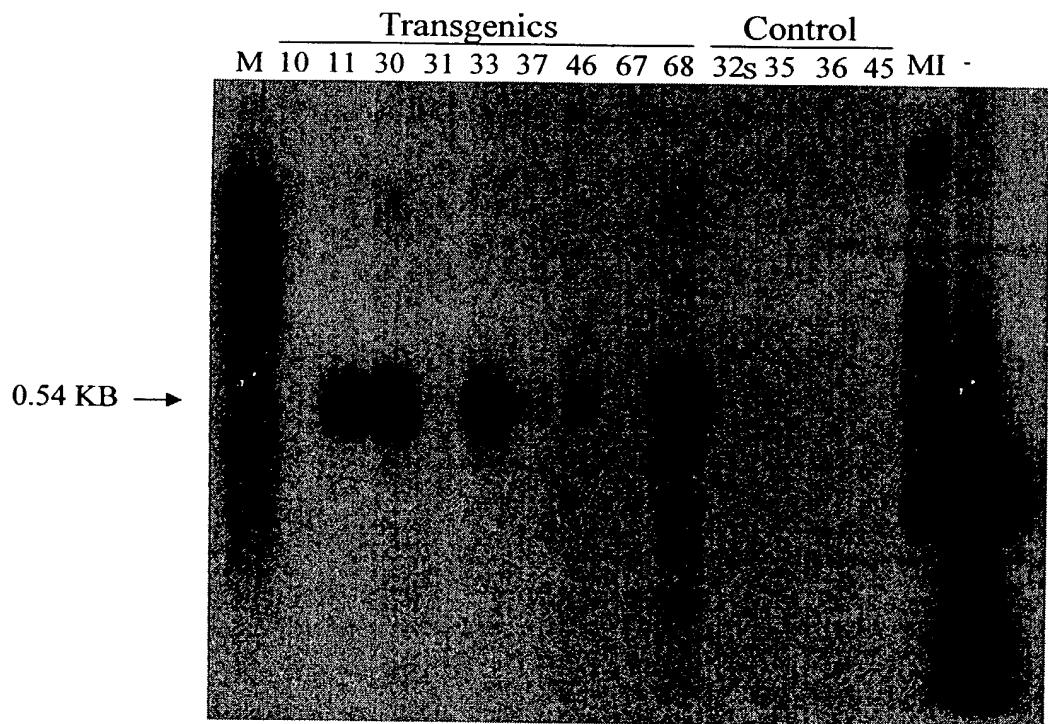
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12/28 10 11 30 31 33 37 46 67 68 32s 35 36 45 MI

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Northern Blot Expression Analysis of TH00-018
Hepatectomized Transgenic Founders



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Figure 9

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Non-Transgenics

A



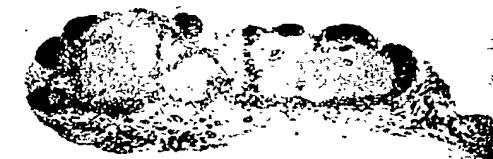
Lymph Node

IL-17E Transgenics

B



C



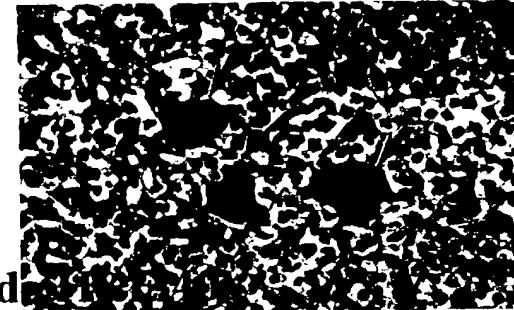
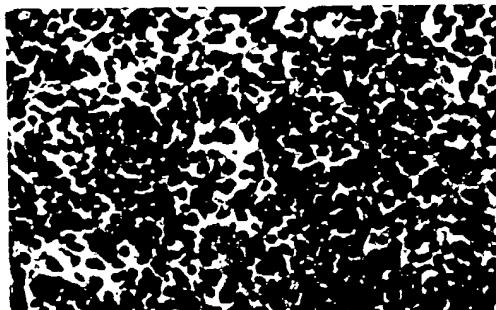
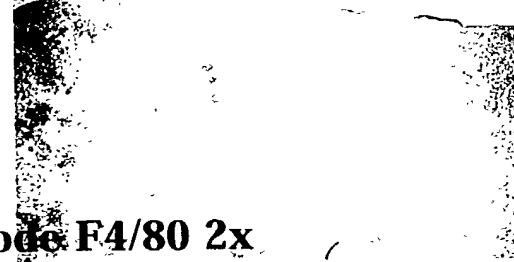
Lymph Node B220 2x

E



Lymph Node F4/80 2x

F



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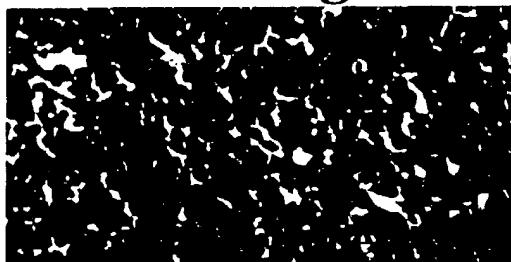
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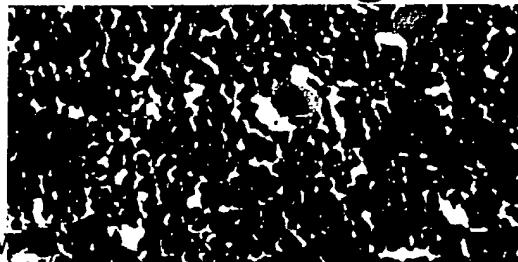
Figure 10

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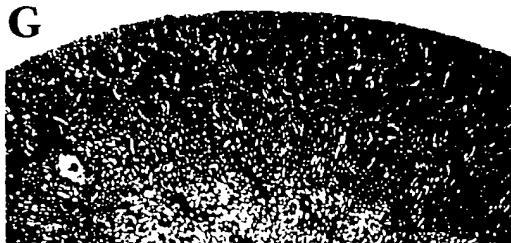
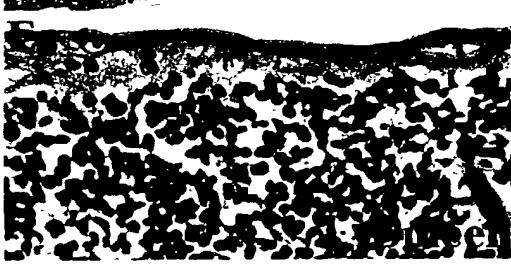
Non-Transgenics



IL-17E Transgenics



Spleen B 20 2x



Spleen E 2x

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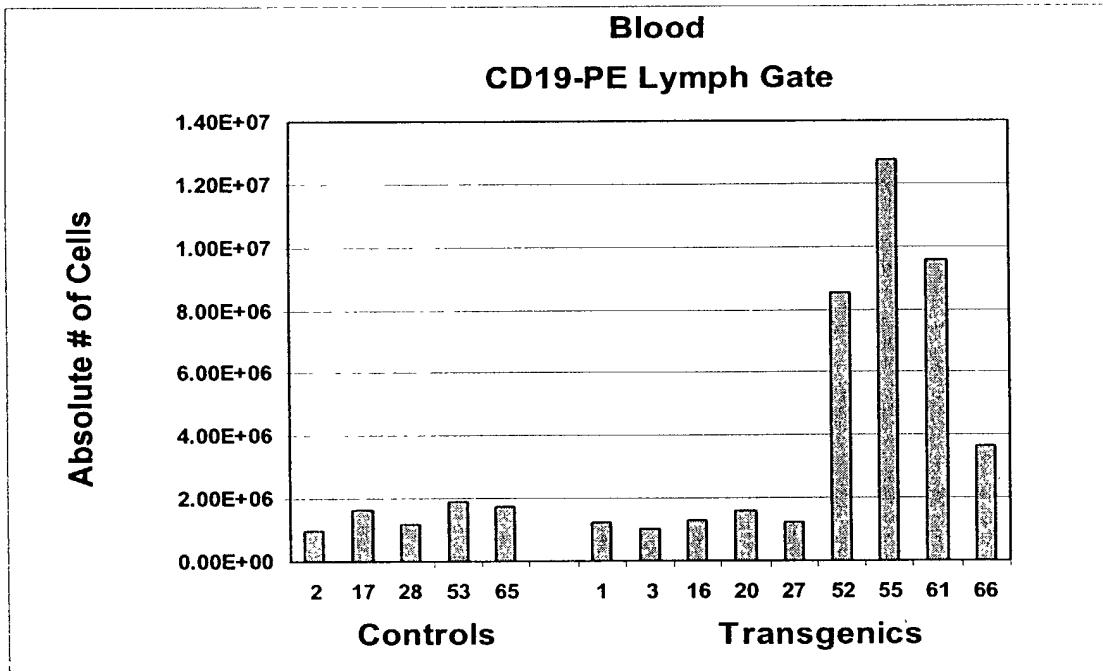
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Figure 11



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3 10 03 32 22 5 43 11 10 03 02 22 43 22

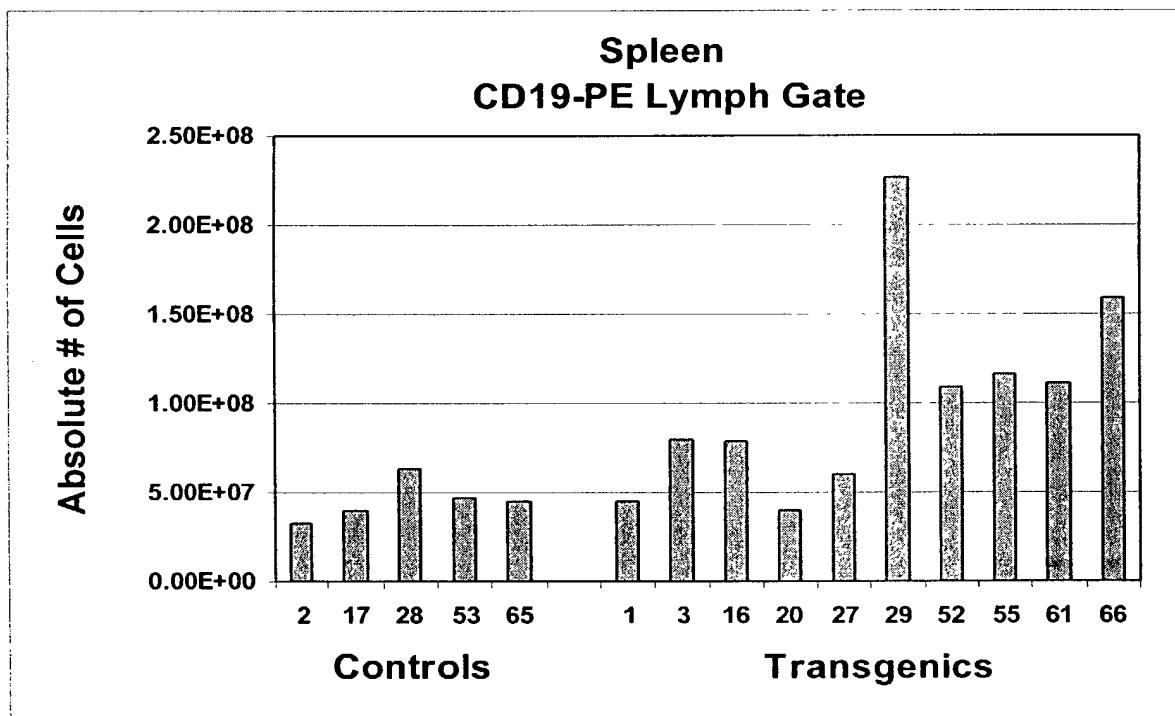
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Figure 12



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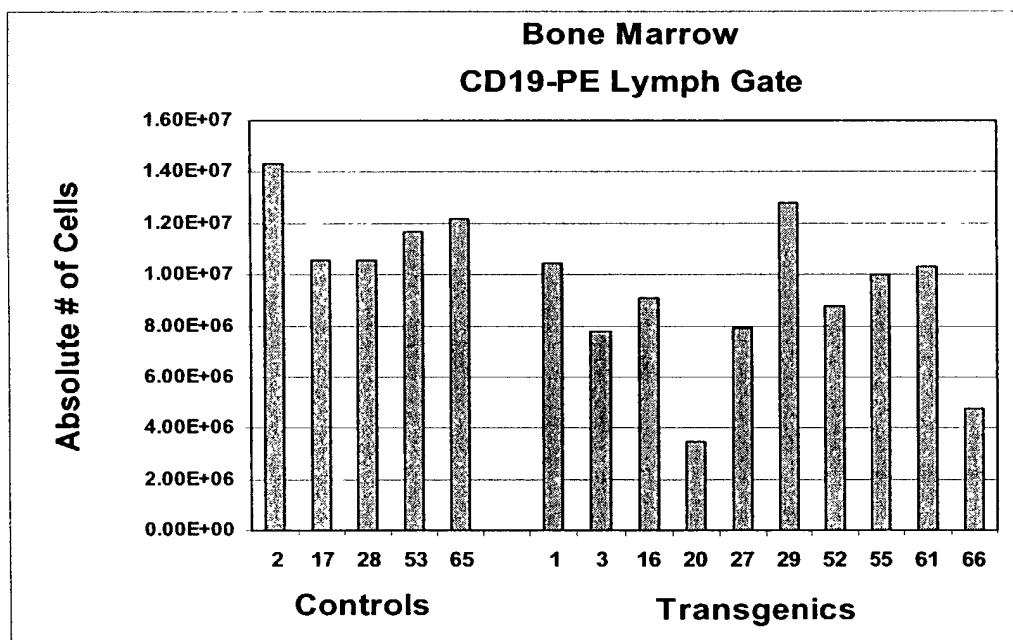
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Figure 13



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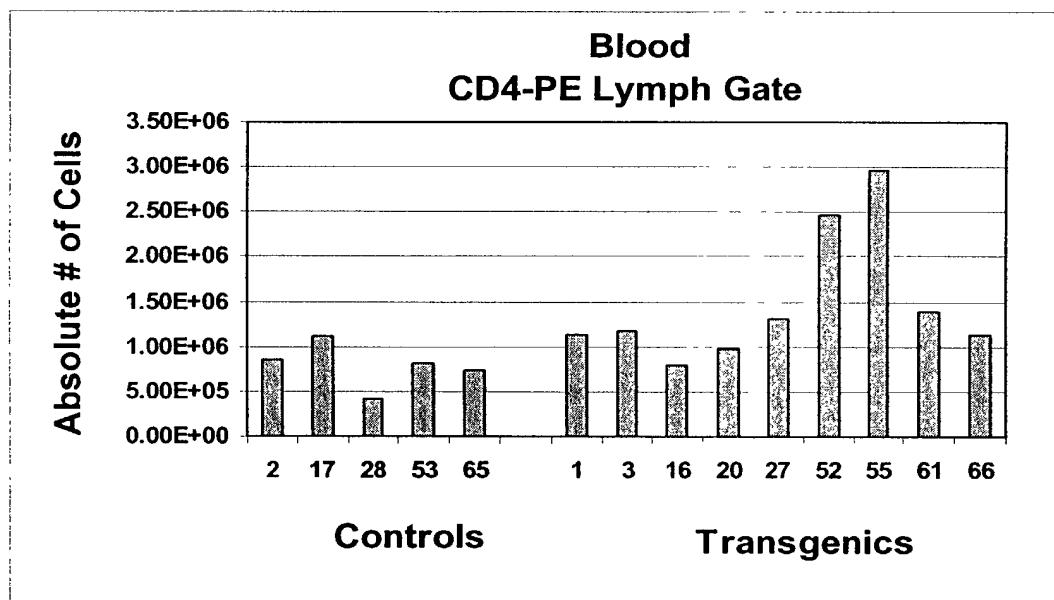
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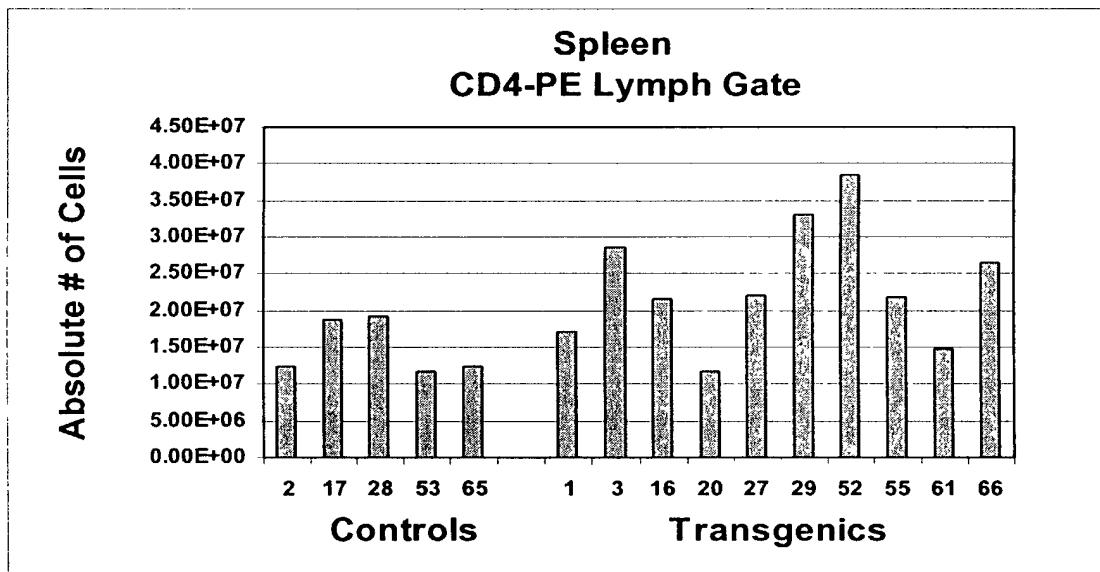
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Figure 15



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Figure 16

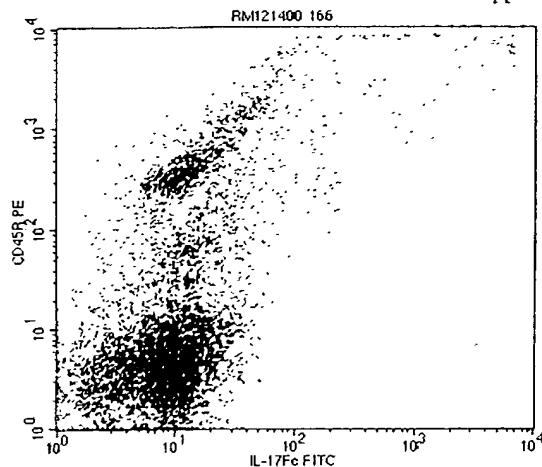
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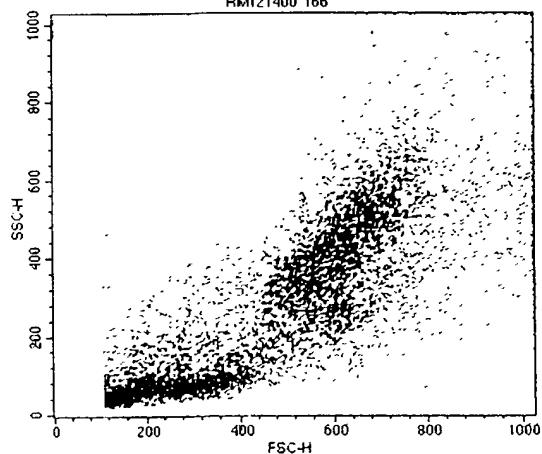
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CD45R+ CELLS EXPRESSING IL17Br IN
TRANSGENIC BONE MARROW

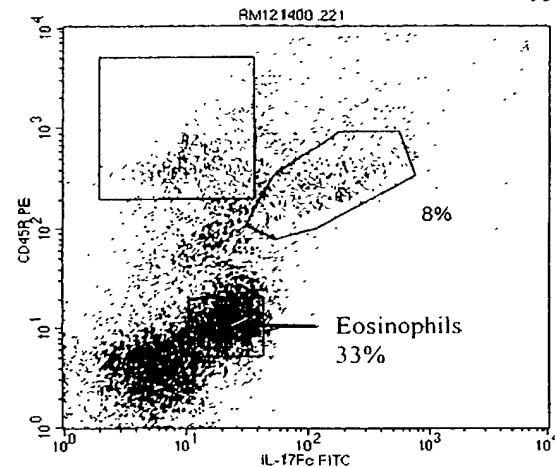
Control



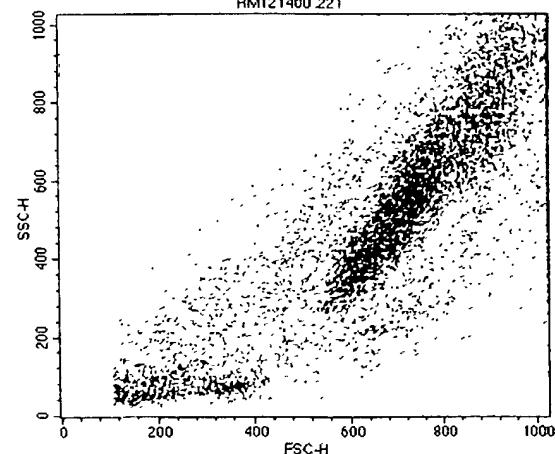
RMI21400 166



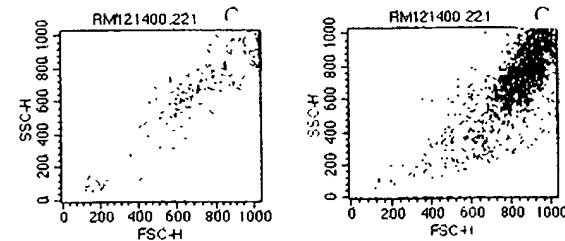
Transgenic



RMI21400 221



RMI21400 221



Granulocyte-like
cells

Eosinophil-like cells

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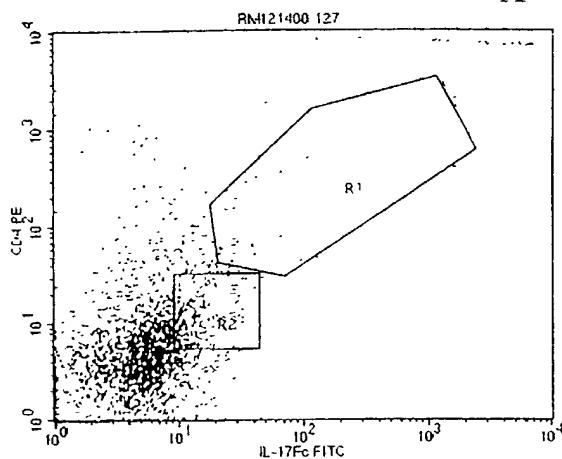
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Figure 17

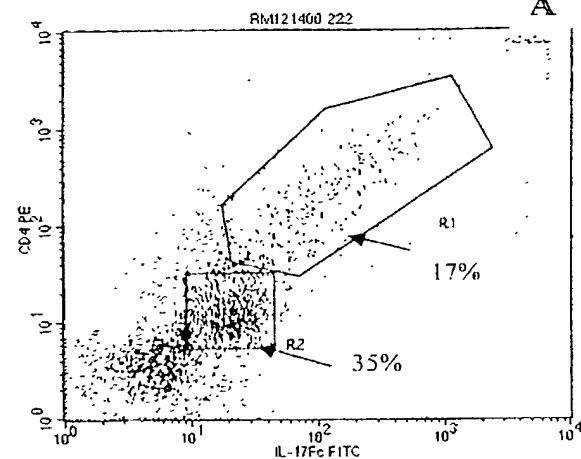
CD4+ CELLS EXPRESSING
IL17Br IN TRANSGENIC BONE
MARROW

A



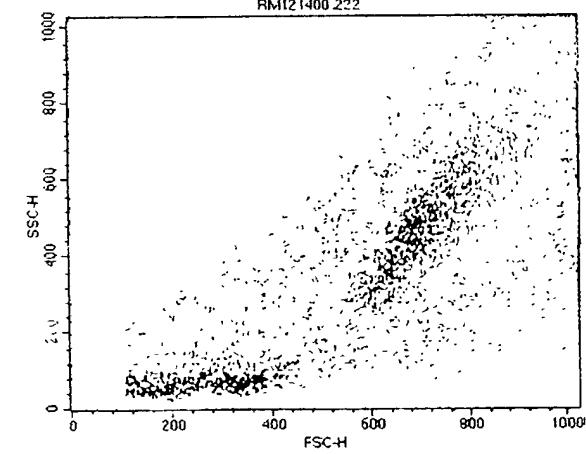
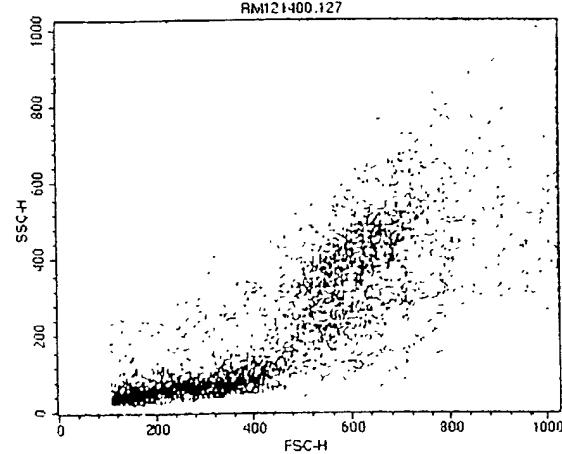
CONTROL

A



TRANSGENIC

B



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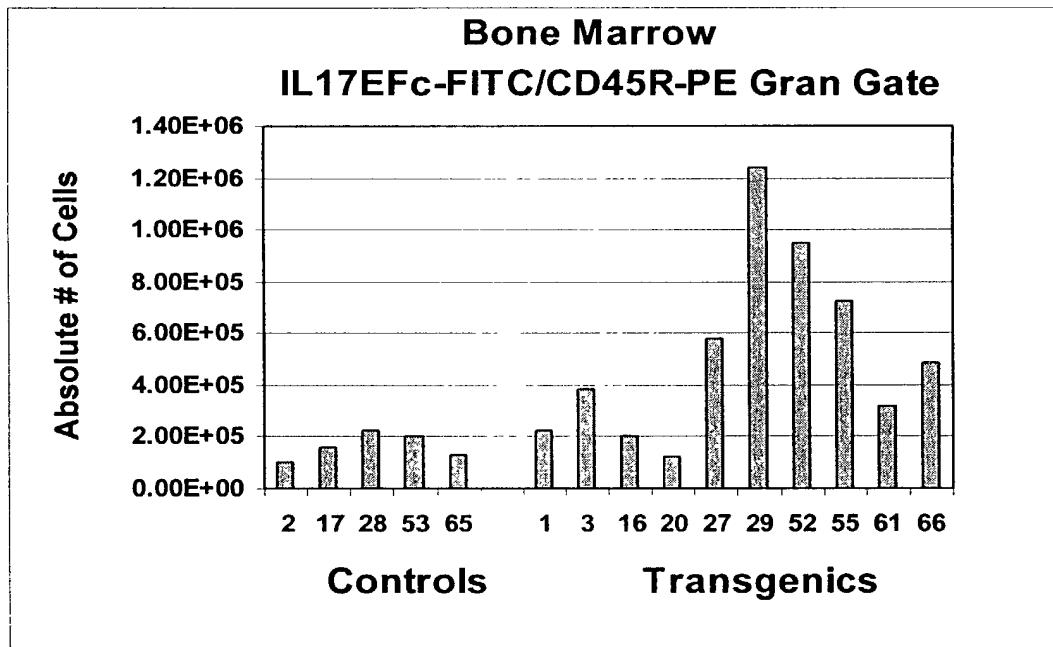
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Figure 18



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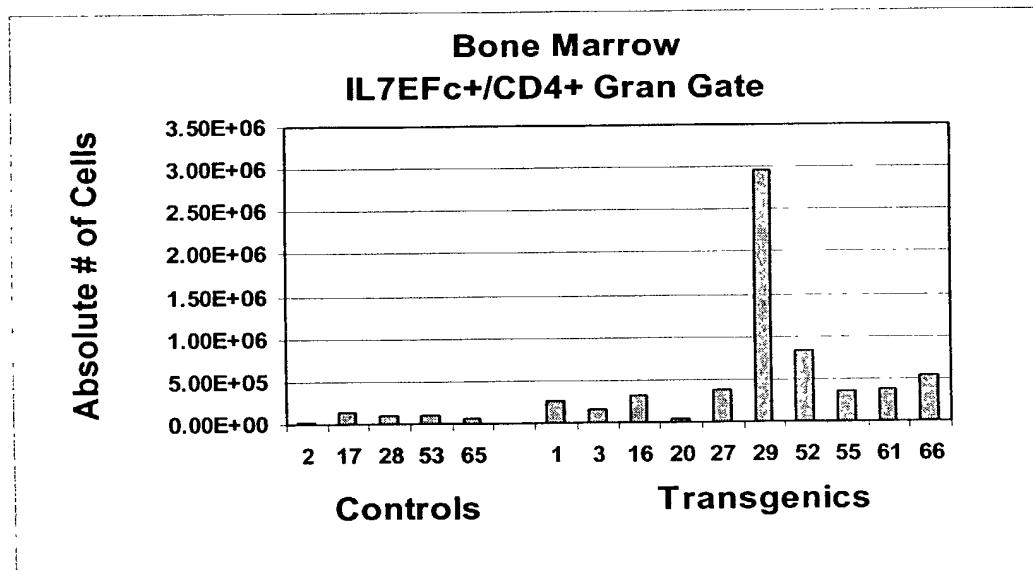
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Figure 19



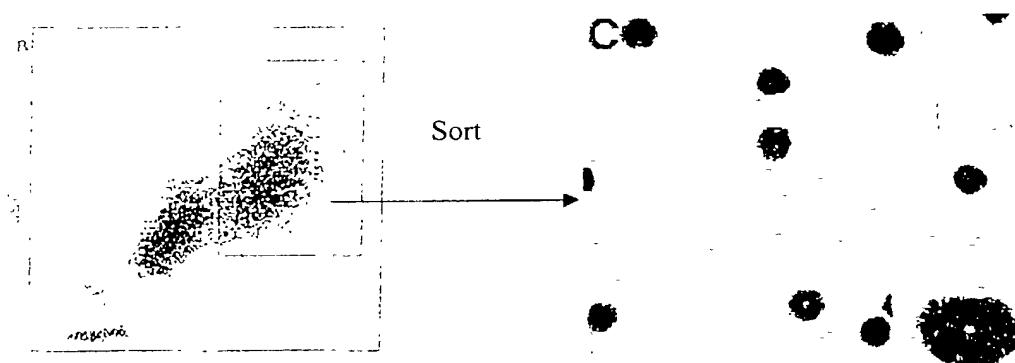
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Figure 20



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Figure 21A

Non-transgenic Control

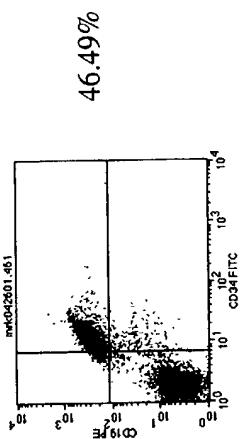
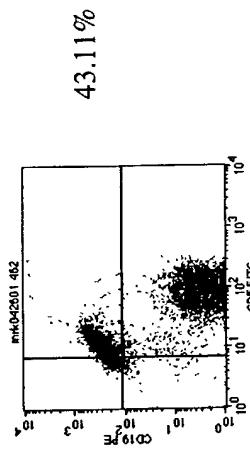
CD5+ on CD19+ Lymphocytes in Lymph Node



CD34+ on CD19+ Lymphocytes in Lymph Node



Transgenic



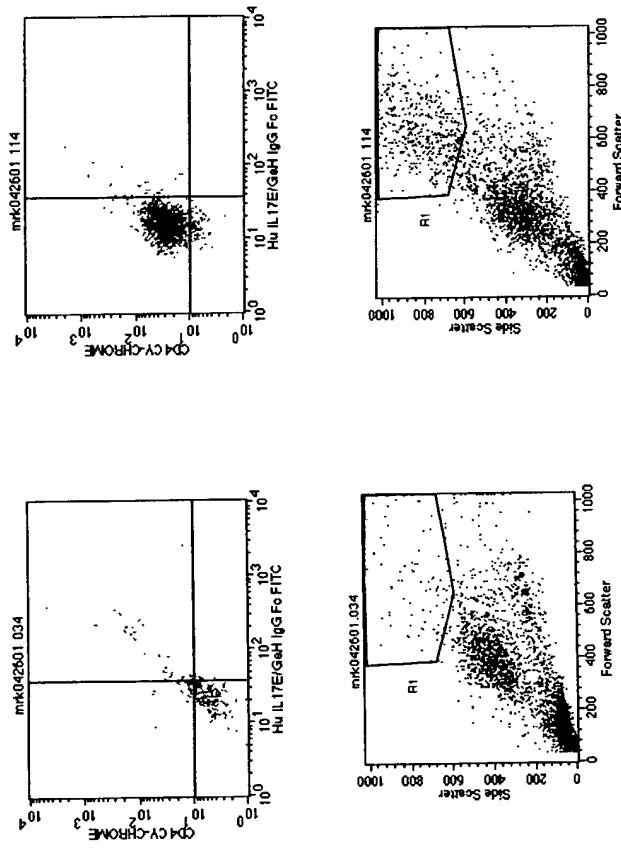
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Figure 21B
CD4 Expression on Eosinophils in Bone Marrow



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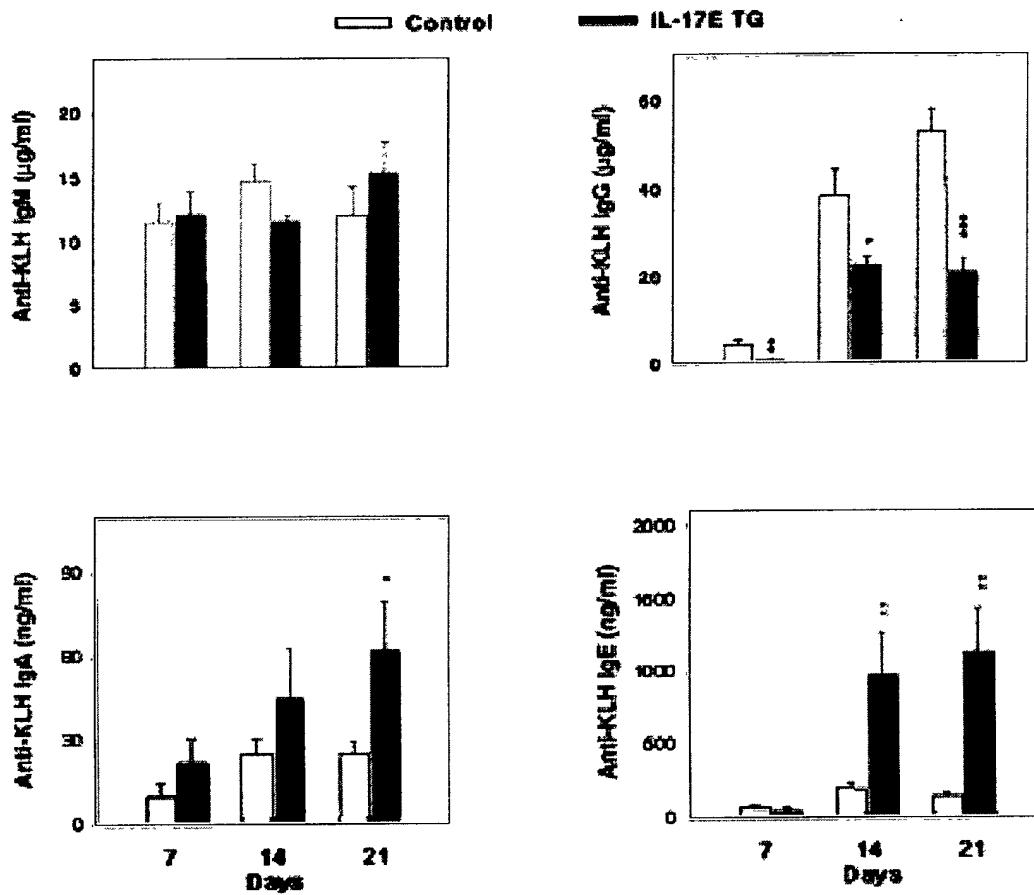


FIG.22

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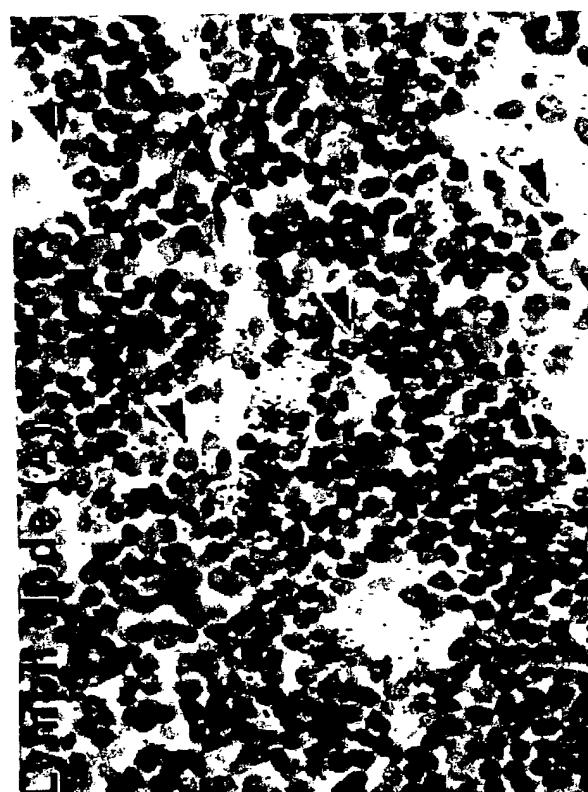
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FIG.23